

Fig. 1

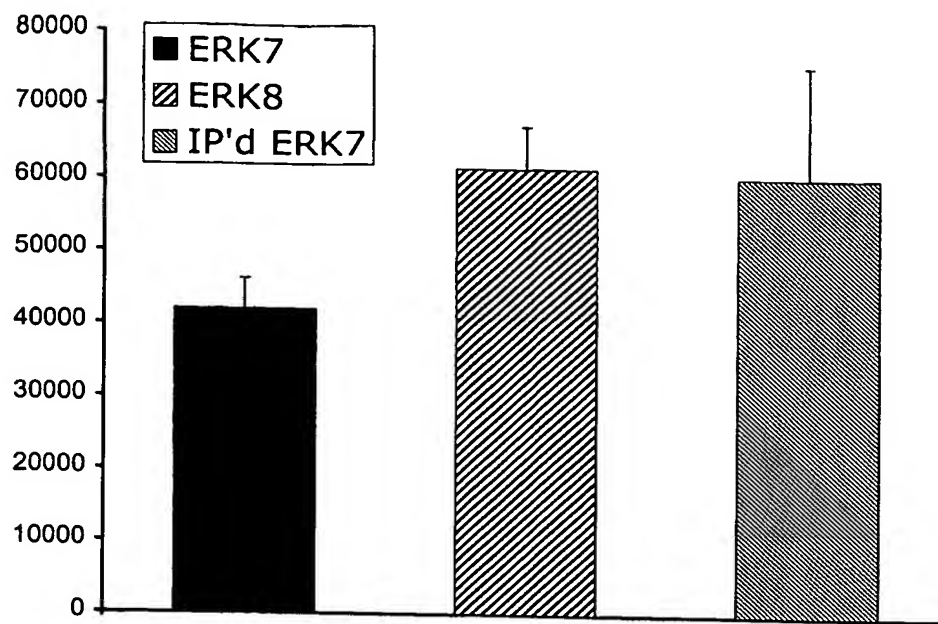


Fig. 2

Fig. 3

Rat ERK7	MCAA	EVDRHVSQR	YLKRR	LGK	GAY	IVWK	AMDRRT	GEVV	AIKK	IFDA	FRDQ	TD	QA	RT	60
Mouse ERK7	MCAA	EVDRHVAQR	YLKRR	LGK	GAY	IVWK	AMDRRT	GEVV	AIKK	IFDA	FRDQ	TD	QA	RT	60
Human ERK8	MCT	-VVDPR	IVRRYLL	RRQL	GQ	GAY	IVWK	AVDRRT	GEVV	AIKK	IFDA	FRD	KT	DA	59
	***	**	:	***	:	***	:	***	:	***	:	***	:	***	***
Rat ERK7	EIM	LLREF	GGHP	NI	IR	LD	VI	PA	KN	DR	DI	YLV	FE	SM	120
Mouse ERK7	EIM	LLKEF	GGHP	NI	IR	LD	VI	PA	KN	DR	DI	YLV	FE	SM	120
Human ERK8	EIT	LLQEF	GDHP	NI	IS	LD	VI	RA	EN	DR	DI	YLV	FE	FM	119
	**	***	.	***	.	***	.	***	.	***	.	***	.	***	***
Rat ERK7	QL	L	RAT	K	F	I	H	S	G	R	V	I	H	R	180
Mouse ERK7	QL	L	RAT	K	F	I	H	S	G	R	V	I	H	R	180
Human ERK8	QL	L	RAT	R	F	L	H	S	G	H	V	V	H	R	179
	*****	:	***	:	***	:	***	:	***	:	***	:	***	:	*****
Rat ERK7	TR	WY	R	A	P	E	V	L	L	S	S	R	W	Y	240
Mouse ERK7	TR	WY	R	A	P	E	V	L	L	S	S	R	W	Y	240
Human ERK8	TR	WY	R	A	P	E	V	L	L	S	S	R	W	Y	239
	*****	:	***	:	***	:	***	:	***	:	***	:	***	:	***
Rat ERK7	E	E	L	Q	L	G	S	D	Y	S	A	L	I	Q	300
Mouse ERK7	E	E	L	Q	L	G	S	D	Y	S	A	L	I	Q	300
Human ERK8	E	D	L	L	A	L	G	S	G	C	R	A	S	V	299
	***	.	***	.	***	.	***	.	***	.	***	.	***	.	***
Rat ERK7	Q	H	P	Y	V	Q	R	F	H	C	P	D	R	E	359
Mouse ERK7	Q	H	P	Y	V	Q	R	F	H	C	P	D	R	E	359
Human ERK8	Q	H	P	Y	V	Q	R	F	H	C	P	S	D	E	359
	*****	.	***	.	***	.	***	.	***	.	***	.	***	.	***

Fig. 3 (continued)

Rat ERK7	GVVASRAELRAS--QRQSLKPGVLPQVLAETPARKRGPKPQNGHGHDPHEVE-----V	410
Mouse ERK7	GVVASRAELRASPARTQSLKSGVLPQVPAETPARKRGPKPQNGHGHDPHEVE-----V	412
Human ERK8	GVSPSQAHLHKP-----RADPQLPSRTFVQGPRPRPQSSPGHDPAEHESPRAAKNV	410
	** .*:.*: . . **: :.***: *: . . **** . *: . :. . *	
Rat ERK7	RRQSSDPLYQLPPPGSGERPPPGATGEPSPAPSGVKTQVRAVAPSLTSQAAQAANQPLIR	470
Mouse ERK7	RRQSSDPLFLQLPPPGSGERPPPGATGQPPSAPSGVKTQVRAMAPSLTSQAEQAANQALIR	472
Human ERK8	PRQNSAPLLQTALLNGGERPPGKAEPITLSLVKPSGRGAAPSLTSQAAQAQVANQALIR	470
	.* ** * . * ***. ** : * **. *. ***** **.*.***	
Rat ERK7	SDPARGGGPRAVGARRVPSRLPREAPEPRPGRRMFGISVSQGAQAARAALGGYSQAYGT	530
Mouse ERK7	SDPARGGGPRAVGARRVPSRLPREAPEPRPGRRMFGISVSQGAQAARAALGGYSQAYGT	532
Human ERK8	GDWNRGGGVRVASVQVPPRLP---PEARPGRRMFSTALQGAQGGARALLGGYSQAYGT	527
	. * **** *.....:*** **.*.*****. *. *****.*** *****	
Rat ERK7	VCRSALGRLPLLPGPRA	547
Mouse ERK7	VCRSALGRLPLLPGPRA	549
Human ERK8	VCHSALGHLPLLEGHV	544
	.:**.*:**** * :.	

CLUSTAL W (1.82) Multiple Sequence Alignments

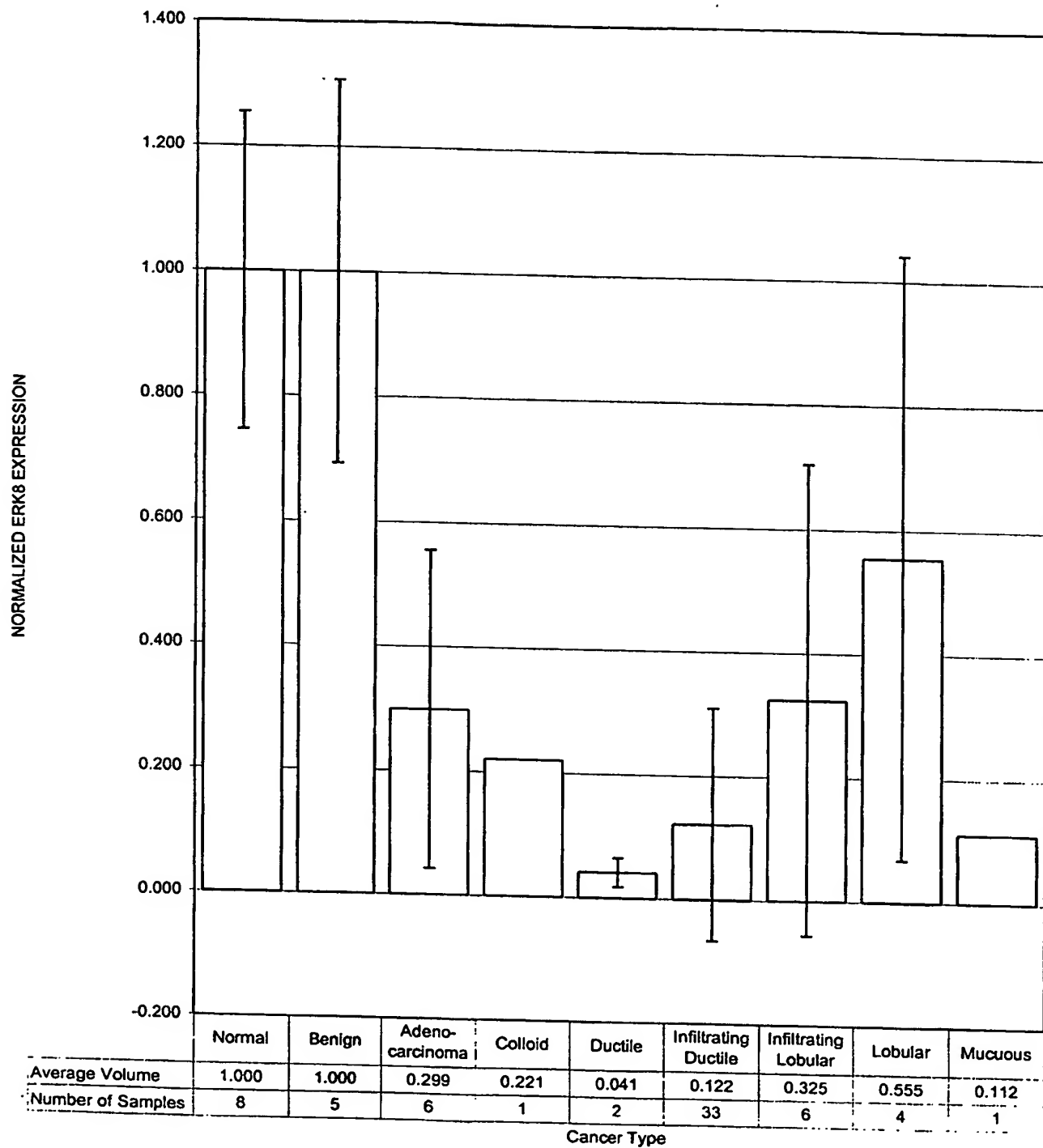
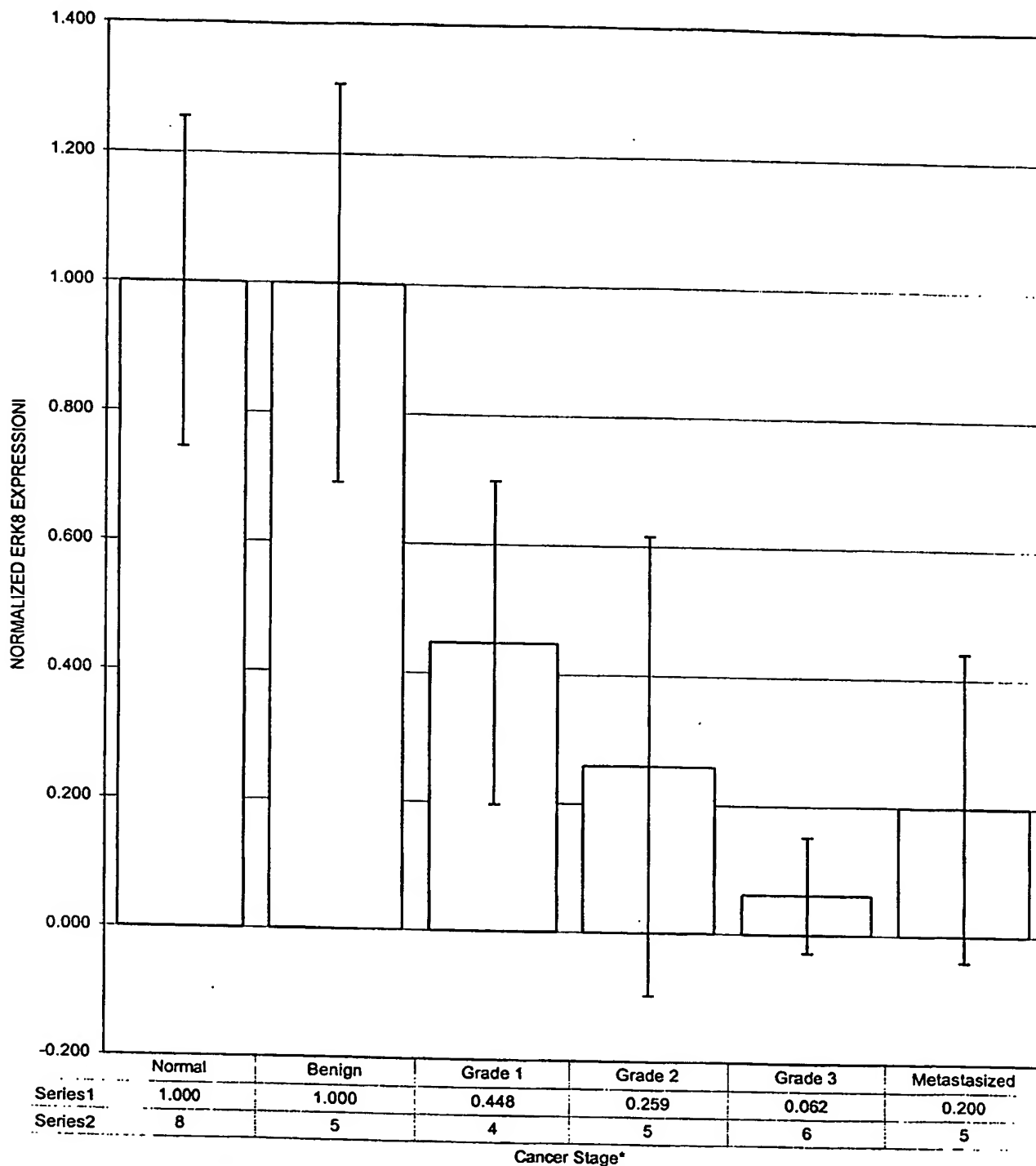
Fig. 4 **Erk8 Expression in Different Breast Cancers**

Fig. 5 Erk8 Expression in Breast Cancers of Different Grades

*Cancer Types: Adenocarcinoma, Colloid, Infiltrating Ductal, Infiltrating Lobular, & Lobular

Fig. 6

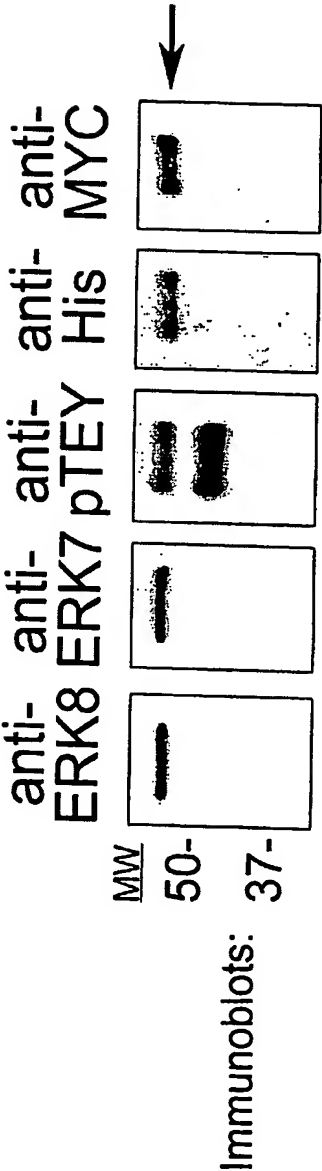


Fig. 7

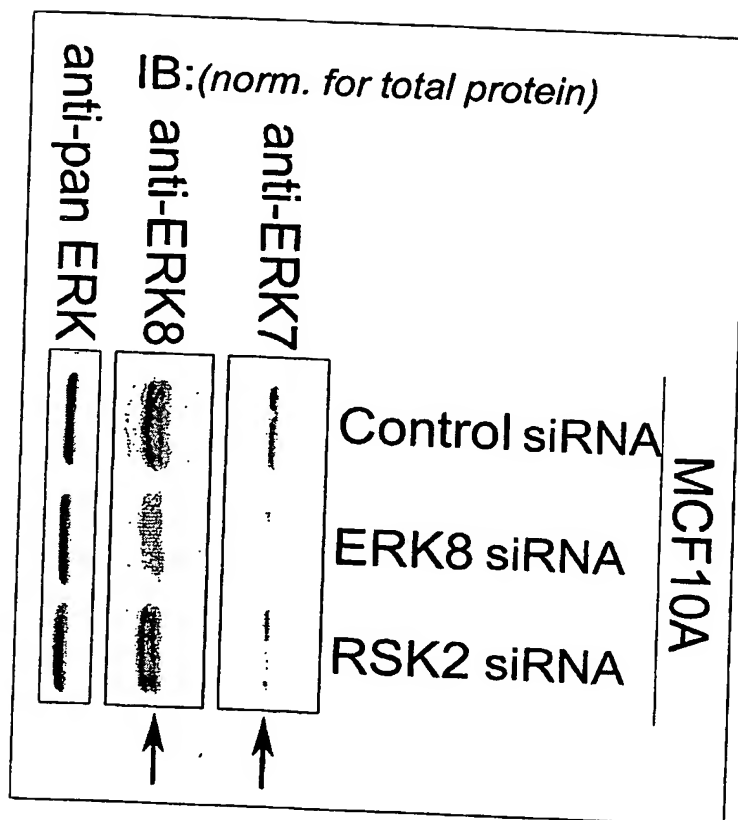


Fig. 8

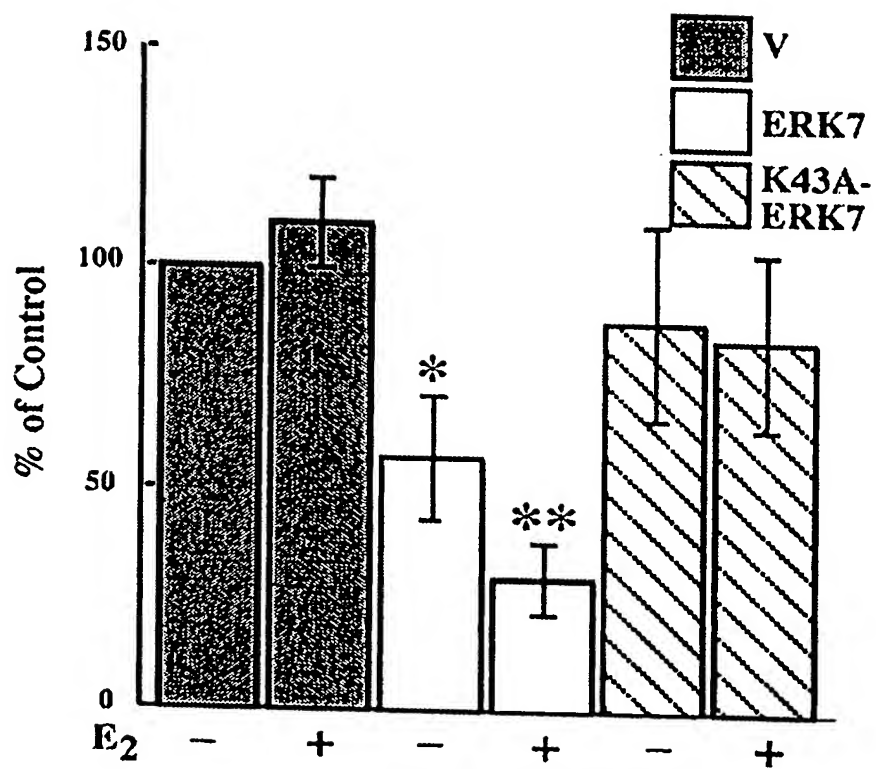


Fig. 9A

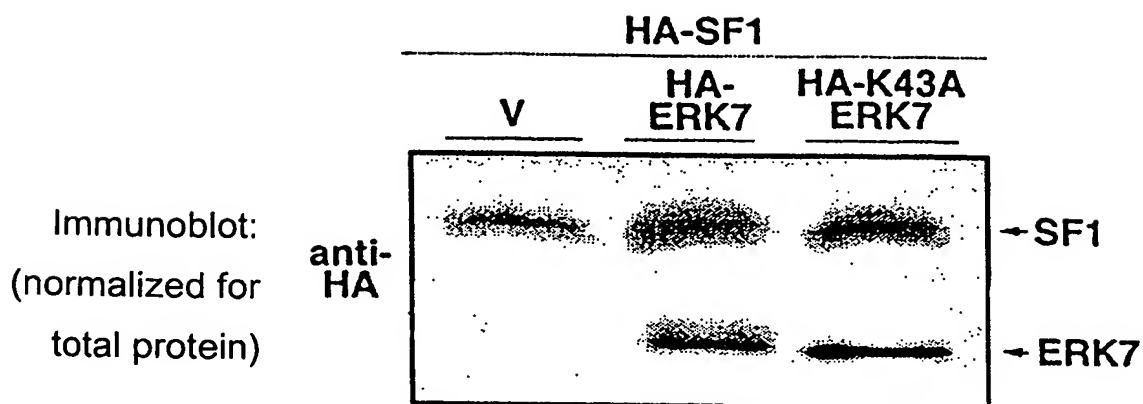


Fig. 9B

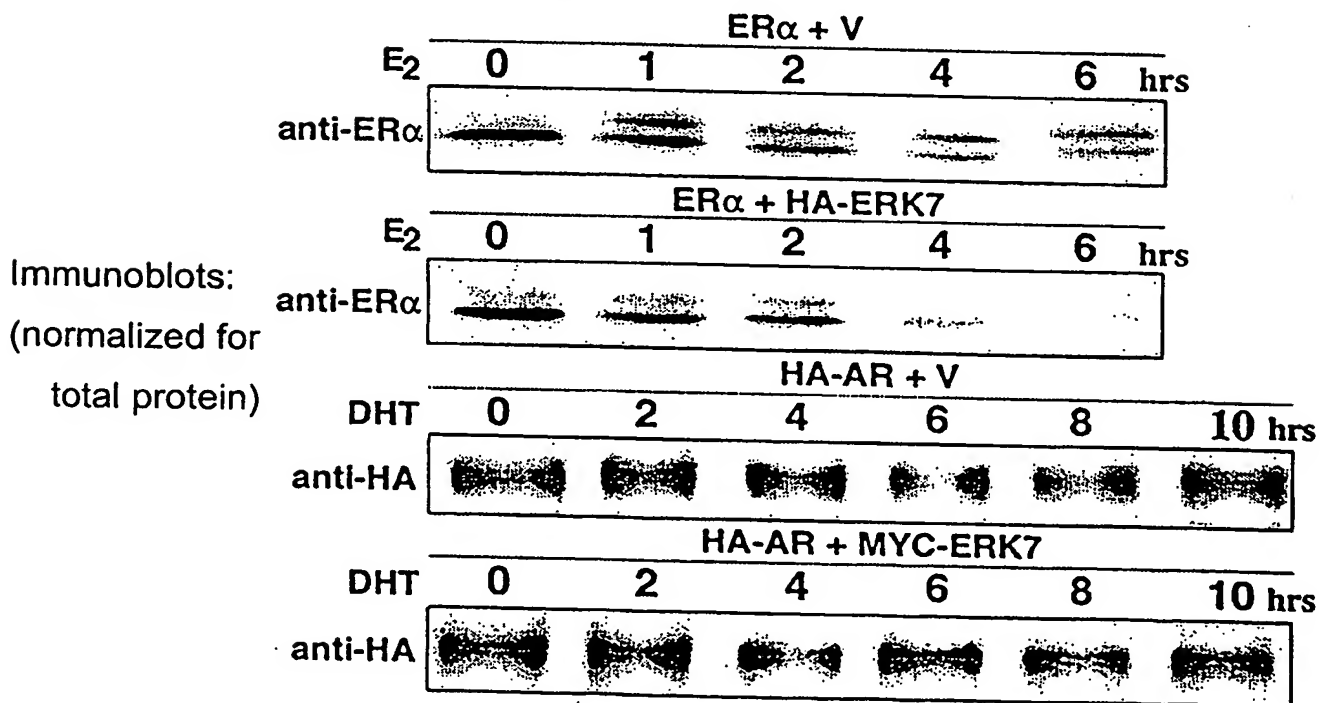


Fig. 10A

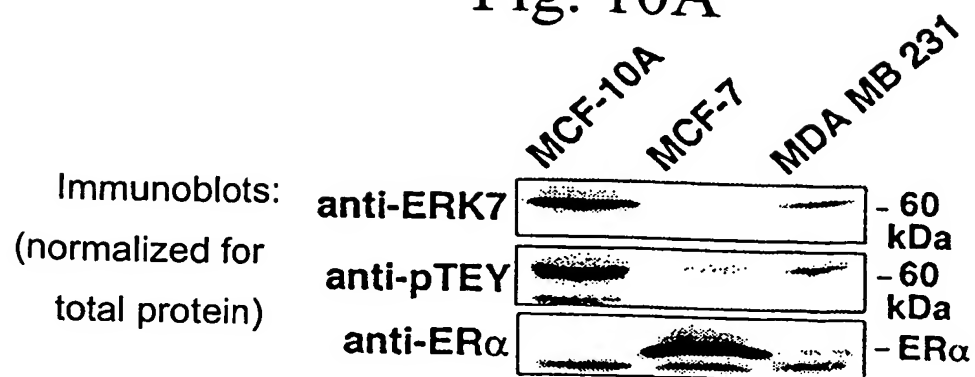


Fig. 10B

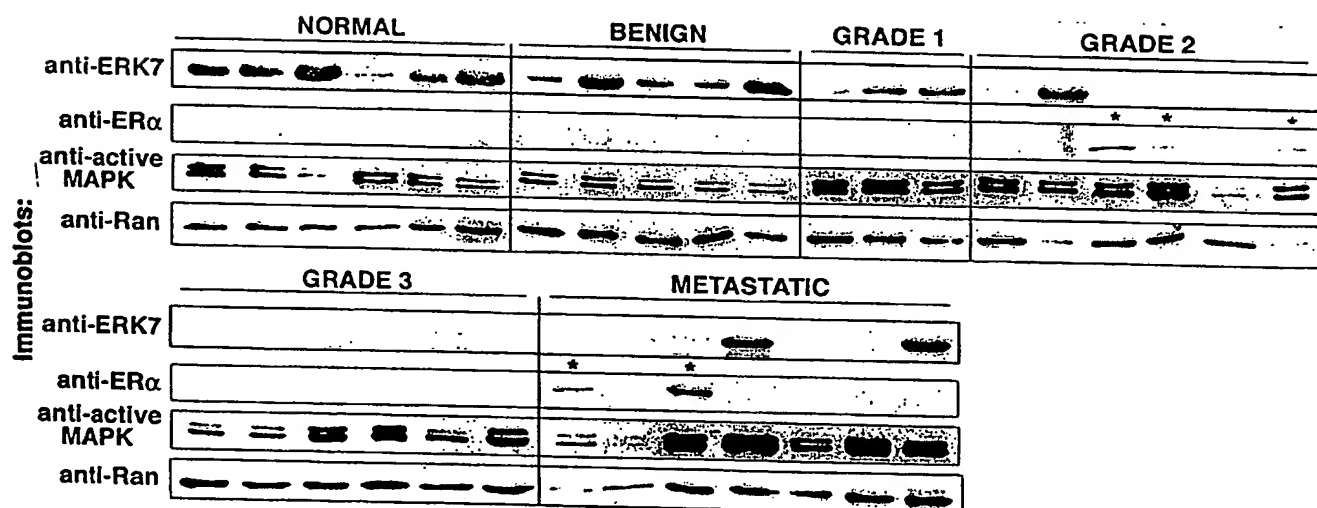


Fig. 11

